DOCUMENT RESUME

ED 157 582 JC 780 426

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TITLE	Educating for Underemployment? A Comparison of Female and Male Respondents of Student Follow-up Studies.
PUB DATE	Jun 78
NOTE	22p.; Paper presented at the Annual Meeting of the North Central Region AERA/SIG Community/Junior College Research (Kenosha, Wisconsin, June 1978) ; Parts of appendix may be marginally legible
EDRS PRICE	MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS	College Programs; Community Colleges; *Employment Patterns; Females; Followup Studies; Graduate Surveys; Institutional Research; Job Placement; *Junior Colleges; Males; Salary Differentials; *Sex Discrimination; Sex Stereotypes; *Technical Institutes; Unemployment; Vocational Education; *Vocational Followup
IDENTIFIERS	Gateway Technical Institute WI

ABSTRACT

This study attempted to identify enrollment patterns of male and female students at Gateway Technical Institute and employment patterns of graduates to determine whether sex role stereotyping was a legitimate concern. The study was based on annually conducted six-month and three-year follow-up studies of graduates and non-completers, and program enrollment data. Both questionnaires solicited information on the relevance of college major to current employment, unemployment, and range and average monthly wages for those employed in their training fields; 676 (92%) responded to the six-month and 380 (57%) to the three-year surveys. Comparison of female and male responses showed a higher percentage of females than males employed in their occupational training field, due in part to the large proportion of women in health services, where placement is virtually 100%. A lower percentage of 1977 women than men graduates were in the job market, and an even greater percentage of 1975 females were not in the market. Reasons tended to be sex-linked; women cited family responsibilities and men cited further schooling. Females averaged 25% less in wages than males, with a greater differential for 1975 graduates, and started at lower salaries. Respondents tended to graduate from either female or male intensive fields. (TR)

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EDUCATING FOR UNDEREMPLOYMENT?

A COMPARISON OF FEMALE AND MALE RESPONDENTS OF STUDENT FOLLOW-UP STUDIES

JUNE, 1978

JC 780 426

Gateway Technical Institute
• Kenosha • Racine • Walworth

Educating for Underemployment?

A Comparison of Female and Male Respondents of Student Follow-up Studies

June, 1978

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Contents

Page

Introduction 1

Methodology 1

Results 3

Summary and Recommendations 9

Appendices

A. Survey Instruments 11

B. Percentage Breakdown of Respondents 13

Educating for Underemployment? A Comparison of Female and Male Respondents of Student Follow-up Studies

Introduction

There has been an increasing awareness at Gateway Technical Institute and in the state of Wisconsin of sex role stereotyping in terms of program enrollment and employment patterns of students. There is also increasing concern that women are not receiving the same benefits from education as men in terms of job market competitiveness and wage earnings. Although sex role stereotyping is assumed to exist, there is little actual data to work with in counseling students or on which to base decisions for change. This study was undertaken as a result of this lack of data regarding the impact of vocational, technical education on women.

The objectives of the study are to:

1. Identify enrollment patterns of female and male students.
2. Identify employment patterns of female and male graduates.
3. Determine whether or not sex role stereotyping appears to be a legitimate concern.
4. Provide data on which to base further studies in this area.

Methodology

Each year Gateway Technical Institute, in conjunction with the Wisconsin Vocational, Technical and Adult Education system, conducts a six-month follow-up study of all graduates and noncompleters. In addition to this, Gateway conducts a three-year follow-up study of graduates. This study is based on responses from graduates of the 1976-1977 and 1974-1975 school years.

The six-month follow-up questionnaire was sent to 733 graduates, of which 676 responded for a 92 percent response rate. Three mailings were sent followed by telephone interviews to nonrespondents. The three-year follow-up questionnaire was sent to 669 graduates of which 380 were returned for a 57 percent response rate, after three mailings. The three-year follow-up includes the same questions found on the six-month follow-up, and therefore, the two questionnaires solicit comparable data. Copies of the survey instruments are in Appendix A.

Data was analyzed using simple descriptive statistics, providing a profile of employment patterns, including: respondents employed in occupations related to their field of training, respondents employed in occupations unrelated to the field of training, respondents not in labor market, respondents unemployed and seeking employment, and the range and average monthly wages of respondents employed in the field of training. Female and male respondents were then compared to identify differences in employment patterns.

Program enrollments for the 1974-1975 and 1976-1977 school years were looked at in terms of female and male enrollment. Female intensive, male intensive and dual enrollment programs were identified. Female intensive programs are defined as those programs with over 75 percent female enrollment, while male intensive programs are those with over 75 percent male enrollment. Dual programs then have between 25 percent and 75 percent female and male enrollment. These programs were then compared to the results of the follow-up studies to determine expected employment and wages for students in these programs.

Results

Tables 1 and 2 show a percentage breakdown of responses from the six-month and three-year graduate follow-ups. This information is presented graphically for total respondents of each survey in Appendix B.

Table 1

Six-Month Follow-up of
1977 Graduates - Summary of Response

Category		n	% Employed Related Occupation	% Employed Unrelated Occupation	Not in Labor Market	Seeking Employment	Average Monthly Salary
Total Respondents	Female	417	81.1%	9.1%	4.3%	5.5%	$685
	Male	259	68.7	20.5	6.2	4.6	915
Associate Degree Respondents	Female	204	82.4	10.3	1.0	6.4	708
	Male	181	68.0	22.1	5.5	4.4	978
Diploma Respondents	Female	213	79.8	8.0	7.5	4.7	654
	Male	78	70.5	16.7	7.7	5.1	796

Table 2

Three-Year Follow-up of
1975 Graduates - Summary of Response

Category		n	% Employed Related Occupation	% Employed Unrelated Occupation	Not in Labor Market	Seeking Employment	Average Monthly Salary
Total Respondents	Female	221	79.2%	10.0%	10.0%	0.9%	$818
	Male	159	69.2	22.0	6.9	1.9	1,148
Associate Degree Respondents	Female	116	77.6	11.2	9.5	1.7	888
	Male	116	72.4	22.4	4.3	0.9	1,194
Diploma Respondents	Female	105	81.0	8.6	10.5	0.0	753
	Male	43	60.5	20.9	14.0	4.7	1,034

A comparison of female and male responses shows a higher percentage of females employed in their occupational field of training in all response categories; while a higher percentage of men are employed in fields unrelated to their area of training. This may be due in part to the large proportion of women in health services training, where placement is virtually 100 percent.

The 1977 graduate responses show a lower percentage of women than men not in the labor market, while a greater percentage of the 1975 women graduates are out of the labor market. Reasons given tended to be sex-linked. Women cited family responsibilities as the reason they were not in the labor market, while men gave further schooling as a reason for being out of the labor market.

The percentage of respondents unemployed and seeking employment shows no significant difference between female and male respondents. However, the unemployment rate of the 1977 graduates is substantially higher than for most 1975 graduates. The 1975 male diploma respondents show an unusually high unemployment rate in comparison with the other 1975 respondents. The reason for this is unknown.

It is interesting to note that the total percent employed, in fields both related and unrelated to the area of training, remains fairly constant between 1975 and 1977 graduates. Most of the fluctuation occurs between those not in the labor market and those seeking employment. However, since it is not the same group of people being compared, any comparisons made between 1975 and 1977 graduates must be viewed with extreme caution. Although between group comparisons may be interesting, only comparisons within groups are valid.

Table 3 gives a breakdown of average monthly wages of female and male respondents, showing wage differentials.

Table 3

Comparison of Female and Male
Average Monthly Wage

Category	Average Monthly Wage Female	Male	Difference	Percent Female/Male
1977 Graduates				
Total Respondents	$685	$915	$230	74.9%
Associate Degree Respondents	708	978	270	72.4
Diploma Respondents	654	796	142	82.2
1975 Graduates				
Total Respondents	818	1,148	330	71.3
Associate Degree Respondents	888	1,194	306	74.4
Diploma Respondents	753	1,034	281	72.8

All average monthly wages are computed for respondents employed in their occupational field of training only. Female respondents tend to average about 25 percent less in wages than male respondents. The differential is even greater in 1975 graduate responses. This can be expected since women starting at a lower salary will receive proportionately less than men with percentage salary increases. This results in an average real difference in wages of from $142 to $330 a month.

Table 3 also shows that women tend to benefit less than men from an Associate Degree versus a Diploma. The 1977 male Associate Degree graduate aveaged $182 a month more than the male Diploma graduate; while the female Associate Degree graduate averaged only $54 a month more than the Diploma graduate. The difference is not so great for the 1975 graduate with male Associate Degree graduates averaging $160 more and female Associate Degree graduates $135 more than their Diploma graduate counterparts. The immediate benefits of an Associate Degree for females, however, remain in doubt.

Respondents tend to have graduated from either female intensive or male intensive programs, which makes it difficult to compare responses within programs. Because of this, it was decided to compare program enrollments to identify female and male intensive programs, as well as dual enrollment programs. Table 4 gives a breakdown of programs by female and male enrollments. Only programs offered in both 1974-1975 and 1976-1977 were used in the study.

Table 4

Percentage Female and Male Program Enrollment

Category	Percent Female Enrolled	Percent Male Enrolled	Average Monthly Wage
Total Programs (N=50)			
1976-1977	45%	55%	$830
1974-1975	45%	55%	$974
Female Intensive (greater than 75% female-N=16)			
1976-1977	94%	6%	$668
1974-1975	93%	7%	$808
Male Intensive (greater than 75% male-N=23)			
1976-1977	7%	93%	$915
1974-1975	5%	95%	$1,118
Dual Enrollment (25%-75% female/male-N=11)			
1976-1977	45%	55%	$761
1974-1975	41%	59%	$962

It can be seen that female intensive and male intensive programs are highly sex segregated; and that graduates from female intensive programs tend to average substantially lower wages than graduates of male intensive programs. Dual enrollment programs have a fairly even distribution of females and males, with graduates wages averaging between those of female and male intensive programs. There has been little change in percent female/male enrollments from 1975 to 1977.

In an attempt to determine how female and male graduates of the dual enrollment programs compared as far as job titles and average wages, three of these programs were studied for 1977 graduate responses only. Table 5 presents the results of this study.

Table 5

Job Titles and Wages for Accounting,
Horticulture-Production and Mechanical Drafting Programs

Accounting

Female		Male	
Job Title	Monthly Wage	Job Title	Monthly Wage
Accountant	$780	Accountant	$800
Accountant	797	Accountant	900
Accountant	520	Cost Accountant	975
Junior Accountant	758	General Accountant	1,425
Account Clerk II	900	Office Manager	1,200
Account Clerk I	780	Office Manager	1,650
Account Clerk	780	Manager Trainee	676
Cost Account Clerk	607		
Senior Clerk	771		
Bookkeeper	650		
Bookkeeper	477		
Bookkeeper	606		
Bookkeeper	693		
Bookkeeper	737		
Head Teller	600		
Average Monthly Wage	$615		$1,089

Horticulture-Production

Female		Male	
Job Title	Monthly Wage	Job Title	Monthly Wage
Greenhouse Worker	$460	Nurseryman	$693
Production Horticulture	494	Nurseryman	693
Sales and Design	347	General Nursery	615
Senior Salesperson	442	Landscaper	660
Flowershop Manager	520	Landscaper	693
		Senior Gardener	955
		Assistant Manager	563
Average Monthly Wage	$453		$696

Table 5 (Cont.)

Drafting-Mechanical

Female		Male	
Job Title	Monthly Wage	Job Title	Monthly Wage
Draftsman	$1,087	Draftsman	$737
Draftsman	780	Draftsman	875
Detailer	675	Apprentice Draftsman	866
		Product Designer	1,300
Average Monthly Wage	$847		$944

The Accounting program shows the greatest difference in both job titles and wages. It appears that women are being hired primarily as account clerks and bookkeepers while men are hired in managerial positions. Few graduates, female or male, are being hired solely as accountants. The Horticulture-Production and, to a less degree, the Mechanical Drafting programs both show wage discrepancies for substantially the same job titles.

Summary and Recommendations

The results of this study indicate that sex role stereotyping does exist in program enrollments and in employment of graduates. This supports the findings of a study reported in the November, 1975 issue of Manpower which states that "at least three-quarters of vocational education's female enrollees are preparing for Cinderellahood or for 'something to do' while waiting for the Prince."[1] This is no longer an option for most of today's women. Employment figures from the Department of Labor show almost 54 percent

[1]Mary Ellen Verheyden-Hilliard, "Cinderella Doesn't Live Here Anymore", Manpower, November, 1975, pp. 34-37.

of all women over age 18 are in the work force, and a rising number of these women provide the sole support for their families. Married or unmarried, a woman can expect to work for 25 years. A report by the U. S. Department of Labor states that, "Young women seriously underestimate their future labor force participation, judging by the actual work experiences of mature women."[2]

There is a need for both women and educators to recognize that women must prepare for lives vastly different from ten to fifteen years ago. Vocational education is an excellent means of offering women a career choice. First, however, we must acknowledge that a problem exists; and second, we must be ready to offer support services to women in career counseling and placement.

Based on this study, the following recommendations are made:

1. That career counseling for women include presenting alternatives in male intensive programs leading to "non-traditional" careers.
2. That the teaching of job seeking skills for all students include the types of jobs or job titles a graduate should expect to look for, and appropriate salary scales.
3. That women students be encouraged to seek higher level jobs within their field of training.
4. That continued study be conducted in this area to identify sources of sex-role stereotyping within vocational, technical education.

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[2]U. S. Department of Labor, Women and Work, R & D Monograph 46, 1977, p. 15.

APPENDIX A

Survey Instruments

GATEWAY TECHNICAL INSTITUTE
3520 - 30th Avenue
Kenosha, Wisconsin 53141

1975 Graduate Follow-Up

1. Are you presently employed?

   ☐ Yes--please answer all questions except question 5

   ☐ No--please answer questions 5 through 8

2. Is your present job related to the training you received at Gateway?

   ☐ Yes ☐ No

3. Please indicate your job title and duties

   Job title _____

   Duties _____

   _____

   Name of employer _____
   (Company or Firm)

   Address _____
   (City) (State)

4. What is your present wage before deductions? (Your answer to this question will only be used to determine average wages).

   $ _____ Per hour

   $ _____ Per week Give only one answer

   $ _____ Per month

5. If you are not presently employed, are you:

   _____ Seeking employment

   _____ Unable to find employment in my area of training

   _____ Attending school at _____

   _____ Not presently seeking employment, because _____

   _____

6. How would you rate the following services provided by Gateway?

	Excellent	Good	Fair	Poor	Did not use
Counseling	—	—	—	—	—
Placement	—	—	—	—	—
Student Activities	—	—	—	—	—
Instruction	—	—	—	—	—
Financial Aid	—	—	—	—	—
Student Records	—	—	—	—	—

7. How would you improve any of the above services? _____

   _____

   _____

8. We would welcome any other comments you may wish to share with us concerning Gateway Technical Institute.

   _____

   _____

   _____

Thank you for your cooperation

Lauren DeVuyst, Research Assistant
Research and Planning Services

VOCATIONAL, TECHNICAL AND ADULT EDUCATION
Student Follow-up Questionnaire

PLEASE MARK THE ANSWER THAT MOST CORRECTLY DESCRIBES YOUR SITUATION

1. How do you Feel About the training you received at our school?
   - ☐ Very Satisfied
   - ☐ Satisfied
   - ☐ Unsatisfied
   - ☐ Very Unsatisfied

2. Was getting a job or better job the main reason for attending school?
   - ☐ Yes ☐ No

3. Are you employed?
   - ☐ Yes ☐ No [If "NO," skip to Question 9.]

4. When did you start work with your present employer?
   - ☐ Before enrolling at our school
   - ☐ While at our school
   - ☐ After leaving our school

5. Is your present job related to the training you received at our school?
   - ☐ Yes ☐ No

6. What is your job title, duties and name and address of your current employer?

   Job title _____
   Duties _____
   _____
   _____
   _____

   Name of Employer _____ (Company or Firm)

   Address _____ (City) (State)

7. How many hours do you work during an average week? _____ Hours

8. What is your present wage **before deductions**? (Answers will only be used to determine wage averages, ranges, etc.)

   $_____ Per hour
   $_____ Per week Give only one answer
   $_____ Per month

CONTINUE TO QUESTION 9

9. Since Leaving our School, have you ever had a job related to your training?
   - ☐ Yes ☐ No [If "NO," skip to Question 11]

10. What was your job title, duties and name and address of your last employer in a job related to your training? (If the same as your present job, write "Same")

    Job title _____
    Duties _____
    _____
    _____
    _____

    Name of employer _____ (Company or Firm)

    Address _____ (City) (State)

11. Are you available for Employment?
    - ☐ Yes
    - ☐ No; Employed
    - ☐ No; Attending school _____
    - ☐ No; No related jobs in the area
    - ☐ No; Other (Married, pregnant, disabled, etc.) Please indicate why _____

12. Are you currently seeking employment?
    - ☐ Yes ☐ No

13. Did you graduate from our school?
    - ☐ Yes
    - ☐ No, left to take a job
    - ☐ No, transferred to another school
    - ☐ No, completed what I wanted
    - ☐ No, didn't have enough money
    - ☐ No, other (Please indicate why)

14. What did you like most and least about our school?

    Most _____
    _____
    _____

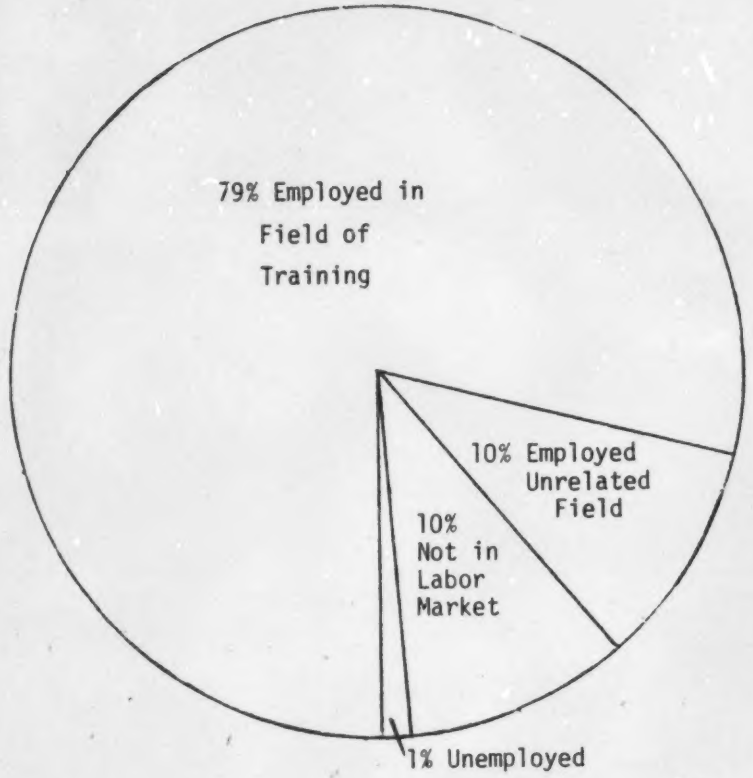
    Least _____
    _____
    _____
    _____

Thank You For Returning This Card

APPENDIX B

Percentage Breakdown of Respondents

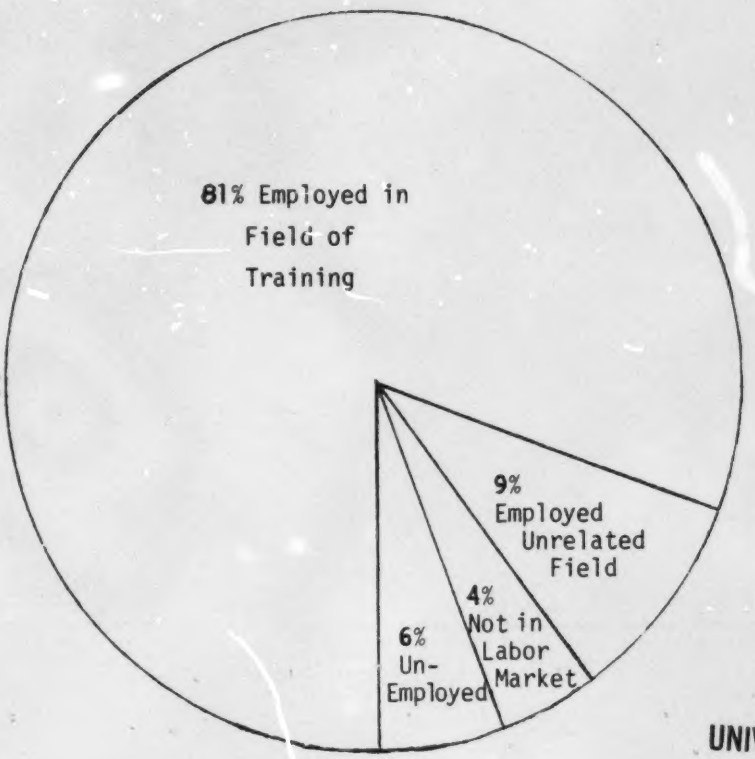
Three-Year Follow-Up
of 1975 Graduates



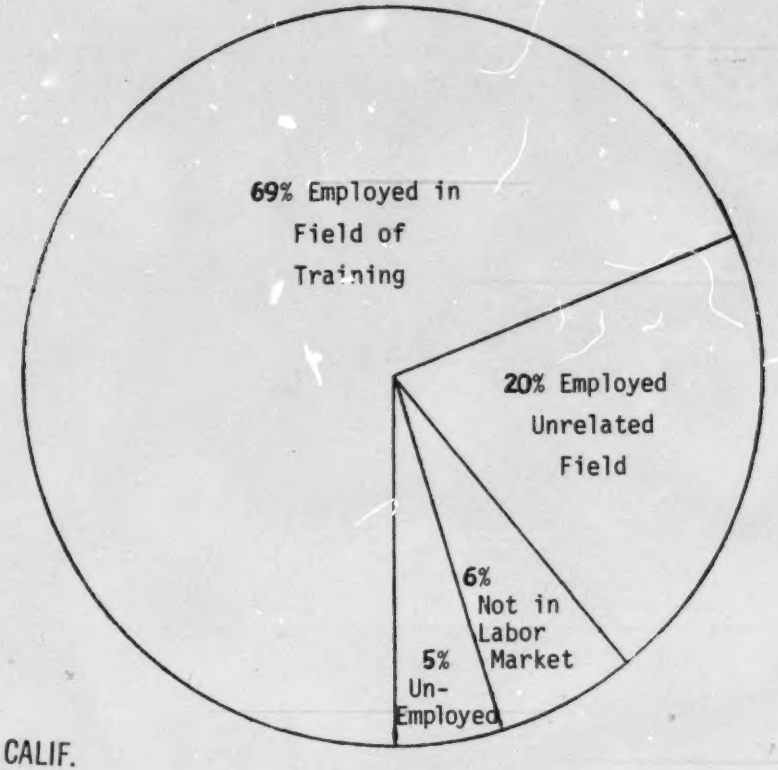
Female

Male

Six-Month Follow-up
of 1977 Graduates



Female



Male

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